

Simultaneous quantification of *Escherichia coli* O157:H7 and *Shigella boydii* using visual-antibody-macroarray

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Table S.1 Standard strains for experiment

ATCC: American type culture collection

CICC: China center of industrial culture collection

CMCC: China general microbiological culture collection center

Standard strains	Sources	Serial number
<i>Staphylococcus aureus</i>	ATCC	29213
<i>Listeria monocytogenes</i>	ATCC	13932
<i>Listeria monocytogenes</i>	ATCC	19112
<i>Listeria monocytogenes</i>	ATCC	19114
<i>Listeria monocytogenes</i>	ATCC	19116
<i>Listeria monocytogenes</i>	ATCC	19117
<i>Listeria monocytogenes</i>	ATCC	19115
<i>Salmonella choleraesuis</i>	CICC	21493
<i>Salmonella typhimurium</i>	CICC	22956
<i>Salmonella typhimurium</i>	ATCC	14028
<i>Salmonella enteritidis</i>	ATCC	13076
<i>Shigella flexneri</i>	ATCC	12022
<i>Shigella sonnei</i>	ATCC	25913
<i>Shigella dysenteriae</i>	Zhuhai Entry-Exit Inspection and Quarantine Bureau	
<i>Vibrio parahaemolyticus</i>	ATCC	17802
<i>Enterobacter sakazakii</i>	ATCC	29004

<i>Enterobacter sakazakii</i>	ATCC	29554
<i>Enterobacter sakazakii</i>	ATCC	12868
<i>Yersinia enterocolitica</i>	ATCC	23715
<i>Yersinia enterocolitica</i>	CMCC	52207
<i>Escherichia coli</i> O157:H7	ATCC	43895
<i>Escherichia coli</i> O157:H7	ATCC	43889
<i>Shigella boydii</i>	ATCC	9207

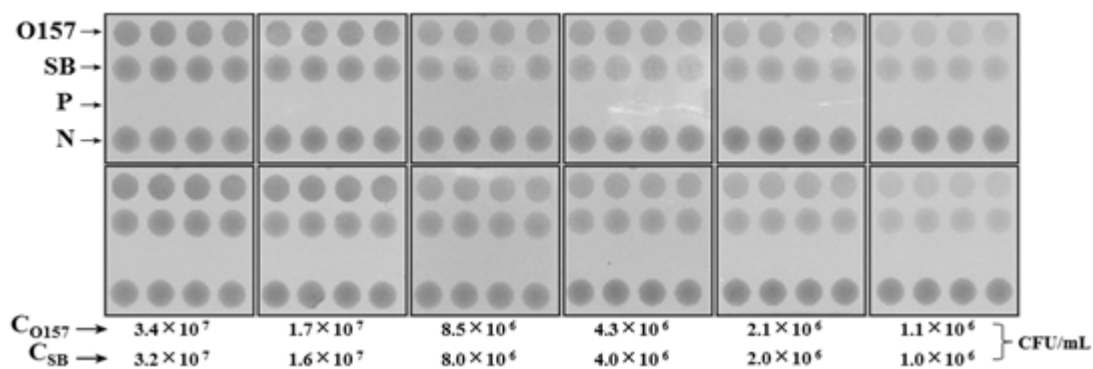


Fig. S.1 Other twice duplicate experiment results of standard curve fitting, made a gray value analysis for each spot about the three times duplicate experiment, in different bacteria liquids concentration, variation coefficient of three average signal values in each group were shown in Table .S.2, of which the maximum was 1.86%, less than 10% inter-assay CV of conventional ELISA experiment, so the stability and reproducibility of standard curves was adequate.

Table .S.2 Variation coefficient of three average signal values in each group.

BLC: Bacteria liquids concentration.

ASV: Average signal values.

CV: Coefficient of variation.

		BLC (CFU/mL)					
		1.1×10 ⁶	2.1×10 ⁶	4.3×10 ⁶	8.5×10 ⁶	1.7×10 ⁷	3.4×10 ⁷
<i>Escherichia coli</i> O157:H7	ASV 1	62	69.75	74.75	80.5	81.5	85
	ASV 2	61.75	68.5	74.25	77.75	82.25	85.5
	ASV 3	61	69.25	72.25	78.25	81.75	85.5
	CV (%)	0.85	0.96	1.79	1.86	0.47	0.47
		BLC (CFU/mL)					
		1.0×10 ⁶	2.0×10 ⁶	4.0×10 ⁶	8.0×10 ⁶	1.6×10 ⁷	3.2×10 ⁷
<i>Shigella boydii</i>	ASV 1	70	74	79.75	83.25	86.5	91
	ASV 2	70.25	74.5	78.25	82.5	87.25	91.75
	ASV 3	69	74.75	78.25	82.25	87.75	92.5
	CV (%)	0.95	0.51	1.10	0.63	0.72	0.82